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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,140	11/25/2003	Ronnie J. Duncan	SDRK-1-1024	4644

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EXAMINER

TRIEU, THAI BA

ART UNIT	PAPER NUMBER
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3748

DATE MAILED: 06/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/722,140	Applicant(s) DUNCAN, RONNIE J.	
	Examiner Thai-Ba Trieu	Art Unit 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6, 8-10, 12, 14-16, 18 and 19 is/are rejected.
- 7) ☒ Claim(s) 4, 7, 11, 13, 17 and 20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

Claims 1-2, 8-9, and 14-15 are objected to because of the following informalities:

- In claim 1, line 2, claim 2, line 1, claim 8, line 3, claim 9, line 1, claim 14, line 3, and claim 15, line 1, the recitation of "**intake products**" should be incorporated with the specification.

Appropriate correction is required.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claim **1** are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim **1** of U.S. Patent No. **6,672,275 B2**. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim **1** of the patent "anticipates" application claim **1**. Accordingly, application claim **1** is not patentably distinct from patent claim **1**.

Patent claim **1** requires the following elements:

- igniting combustive product...;
- directing increased pressure...;
- rotating the expansion ring...;
- exhausting the combustive products...; and
- the combustion products being introduced at about ambient pressure.

While in the instant application, claim **1** requires elements:

- igniting intake product...;
- directing increased pressure...;
- rotating the expansion ring...; and
- exhausting the combustive products....

Thus it is apparent that the more specific patent claim **1** encompasses application claim **1**. Following the rationale in *In re Goodman* cited in the preceding paragraph, where applicant has once been granted a patent containing a claim for the specific or narrower invention, applicant may not then obtain a second patent with a claim for the generic or broader invention without first submitting an appropriate terminal disclaimer. Note that since Application claim **1** is anticipated by Patent claim **1** and since anticipation is the epitome of obviousness, then Application claim **1** is obvious over Patent claim **1**.

Note that in the patent claim, applicant recited ***"combustive/combustion products"***, while in the instant application, the recitation of ***"intake products"*** is merely reworded of ***"combustive/combustion products"***. Both of

“combustive/combustion products” and ***“intake products”*** are considered as “air fuel mixture”, or “natural gas”, or the like, which can be used in an internal or an external combustion engine.

2. Claim **8** is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim **1** of U.S. Patent No. **6,672,275 B2**. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim **1** of the patent “anticipates” application claim **8**. Accordingly, application claim **8** is not patentably distinct from patent claims **1**.

Patent claim **1** requires the following elements:

- igniting combustive product...;
- directing increased pressure...;
- rotating the expansion ring...;
- exhausting the combustive products..; and
- the combustion products being introduced at about ambient pressure;

While in the instant application, claim **8** requires elements:

- introducing intake products..;
- igniting intake product...;
- directing increased pressure...;
- rotating the expansion ring...; and
- exhausting the combustive products....

Thus it is apparent that the more specific patent claim **1** encompasses application claim **8**. Following the rationale in *In re Goodman* cited in the preceding paragraph, where applicant has once been granted a patent containing a claim for the specific or narrower invention, applicant may not then obtain a second patent with a claim for the generic or broader invention without first submitting an appropriate terminal disclaimer. Note that since Application claim **8** is anticipated by Patent claim **1** and since anticipation is the epitome of obviousness, then Application claim **8** is obvious over Patent claim **1**.

Note that in the patent claim, applicant recited "**combustive/combustion products**", while in the instant application, the recitation of "**intake products**" is merely reworded of "**combustive/combustion products**". Both of "**combustive/combustion products**" and "**intake products**" are considered as "air fuel mixture", or "natural gas", or the like, which can be used in an internal or an external combustion engine.

Additionally, the step of "**introducing intake products**" is implicitly recognized in the patent claim. The step of igniting **intake/combustive products** can be performed if and only if the **intake/combustive products** have been introduced into a space/chamber.

3. Claim **14** is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim **1** of U.S. Patent No. **6,672,275 B2**. Although the conflicting claims are not identical, they are not patentably distinct from

each other because claim **1** of the patent "anticipates" application claim **14**. Accordingly, application claim **14** is not patentably distinct from patent claim **1**.

Patent claim **1** requires the following elements:

- igniting combustive product...;
- directing increased pressure...;
- rotating the expansion ring...;
- exhausting the combustive products..; and
- the combustion products being introduced at about ambient pressure.

While in the instant application, claim **14** requires elements:

- introducing intake products...;
- igniting intake product...;
- directing increased pressure...;
- rotating the expansion ring...; and
- exhausting the combustive products....

Thus it is apparent that the more specific patent claim **1** encompasses application claim **14**. Following the rationale in *In re Goodman* cited in the preceding paragraph, where applicant has once been granted a patent containing a claim for the specific or narrower invention, applicant may not then obtain a second patent with a claim for the generic or broader invention without first submitting an appropriate terminal disclaimer. Note that since Application claim **14** is anticipated by Patent claim **1** and since anticipation is the epitome of obviousness, then Application claim **14** is obvious over Patent claim **1**.

Note that in the patent claim, applicant recited ***"combustive/combustion products"***, while in the instant application, the recitation of ***"intake products"*** is merely reworded of ***"combustive/combustion products"***. Both of ***"combustive/combustion products"*** and ***"intake products"*** are considered as "air fuel mixture", or "natural gas", or the like, which can be used in an internal or an external combustion engine.

Additionally, the step of "introducing intake products" is implicitly recognized in the patent claim. The step of igniting intake/combustive products can be performed if and only if the intake/combustive products have been introduced into a space/chamber.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,3, 6, 8, 10, 12, 14, 16, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Kehl (Patent Number 3,311,094).

Kehl discloses a method of employing a rotary machine to produce rotary power comprising:

introducing intake products into a space without compressing in an intake stroke (See Column 1, lines 38-40);

igniting intake products to generate an increased pressure caused by

expansion of the combustive products;

directing the increased pressure into a rotatable expansion ring;

rotating the expansion ring a distance proportional to the increased pressure to accommodate the expanding combusted products; and

exhausting the combustive products (See Figures 1 and 3, Column 1, lines 38-40, Column 2, lines 33-44);

wherein the thermal cycle corresponding to an internal combustion engine or an external combustion engine (See Column 1, lines 8-13).; and

wherein a power stroke volume (120) is greater than or equal to an intake chamber volume (118) (See Figure 2).

Claims 1-2, 5-6, 8-9, 12, 14-15, and 18-19 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Miles et al. (US Patent Number 4,553,513 A).

Miles et al. disclose a method of employing a rotary machine to produce rotary power comprising:

introducing intake products into a space without compressing in an intake stroke (See Column 3, lines 55-59);

igniting combustive products to generate an increased pressure caused by expansion of the combustive products;

directing the increased pressure into a rotatable expansion ring;

rotating the expansion ring a distance proportional to the increased

pressure to accommodate the expanding combusted products; and

exhausting the combusted products;

wherein the thermal cycle corresponding to an internal combustion engine or an external combustion engine (See Column 2-5, lines 1-68, and Column 6, lines 1-37);

wherein the intake products are introduced at or above ambient pressure (See Column 3, lines 55-59); and

wherein the exhaust stroke pressure is about ambient pressure or exceeds ambient pressure (See Column 4, lines 3-6).

Allowable Subject Matter

Claims **4, 7, 11, 13, 17 and 20** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Klassen (Pub. Number 2002/157636 A1) discloses a positive rotary displacement.
- Costantinou (US Patent Number 3,773,022) discloses a rotary engine.

- Kusano (Patent Number JP 55049526 A) discloses a rotary piston internal combustion engine having intake side and exhaust side being at the same pressure as the atmospheric pressure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai-Ba Trieu whose telephone number is (703) 308-6450. The examiner can normally be reached on Monday - Thursday (6:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on (703) 308-2623. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTB
June 8, 2004



Thai-Ba Trieu
Patent Examiner
Art Unit 3748